

REMARKS

Claims 4, 5, 9, 15, 23, 24 and 28 are proposed to be canceled. Claims 10, 16, and 29 are proposed to be rewritten in independent form. Claims 1, 14 and 22 are proposed to be amended to incorporate the limitation of claims 5 and 24. It is respectfully submitted that entry of the Amendment is proper because the Amendment raises no new issues, and because it places the application in condition for allowance, or at least in better form for appeal. With these changes, claims 1, 6-8, 10-14, 16-22, 25-27, and 29-31 will be pending.

Personal Interview of January 18, 2005

The undersigned appreciates the opportunity to have spoken with Examiner Johnston during the personal interview conducted on January 18, 2005. As noted on the Interview Summary Form, it was agreed that the Kamijo et al. patent (U.S. Patent No. 6,566,663) teaches away from operating the device disclosed therein at an apex of the secondary peak shown in Figure 2 therein (see, e.g., column 5, lines 19-21 and 34-36, column 8, lines 14-16, and column 9, lines 48-52 of the Kamijo et al. patent). Further, the Examiner indicated that narrowing the limitation on the variable "c" in independent claim 1 (and presumably independent claims 14 and 22) would advance the present application toward allowance.

Art Rejections

The Office Action includes a rejection of claims 1 and 4-31 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the Kienzle et al. publication (U.S.

Patent Application Publication No. 2002/0084422) in view of the Kamijo et al. patent (U.S. Patent No. 6,566,663). The rejection is respectfully traversed.

Claims 10, 16 and 29

In accordance with the Examiner's indication provided during the personal interview, claims 10, 16 and 29 have been rewritten in independent form, thereby overcoming the rejection of these claims. These claims recite that a temperature dependency of the permeability number of the material has an extremum in the temperature range and that the operating temperature (or nominal temperature as recited in claim 16) is substantially a temperature at which the temperature dependency has the extremum. As noted above, the Kamijo et al. patent teaches away from such operation. Thus, these claims are patentable over the combination of applied references for at least this reason. Allowance of claims 10, 16 and 29 is respectfully requested.

Independent Claims 1, 14 and 22

In accordance with the Examiner's indication provided during the personal interview, claims 1, 14 and 22 have been amended to narrow the limitation on the variable "c" recited therein by incorporating the limitation of claims 5 and 24. While it is believed that claims 1, 14 and 22 were patentable at least for reasons of record, these claims are being further amended to expedite the application to allowance. By this Amendment, the limitation on the variable "c" is being narrowed by an order of magnitude, i.e., to less than $3 \cdot 10^{-5} \text{ K}^{-1}$. Moreover, to the extent that one can determine a value of "c" from the example disclosed at column 13 of the Kamijo et al.

patent, it would appear to be about $1.6 \cdot 10^{-3} \text{ K}^{-1}$ (i.e., 11 divided by 7000). In contrast, the amended value of "c" in claims 1, 14 and 22 is more than 50 times smaller than the value that can be inferred from information from the Kamijo et al. patent. In view of this distinction, combined with the fact that the Kamijo et al. patent teaches away from operating at the apex of the secondary peak shown in Figure 2 therein, claims 1, 14 and 22 are clearly patentable over the combination of applied references.

Applicants note the Examiner's comments bridging pages 13 and 14 of the final Office Action, but those comments do not address or negate the significant distinctions discussed above. For at least these reasons, withdrawal of the rejection and allowance of claims 1, 14 and 22 are respectfully requested.

Dependent Claims

Claims 6-8, 11-13, 17-21, 25-27 and 30-31 depend from either claims 1, 14 or 22. Accordingly, these claims are allowable at least by virtue of dependency.

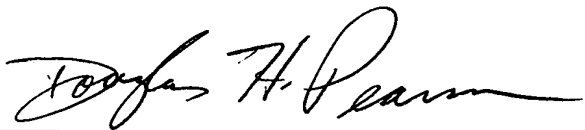
Conclusion

In light of the above, withdrawal of the rejection and allowance of this application are respectfully requested. Should there be any questions in connection with this application, the Office is invited to contact Applicant's representatives at the number below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: January 21, 2005

By: 

Douglas H. Pearson
Registration No. 47,851

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620